

CLAIMS

What is claimed is:

1 1. A method for detecting a defective disk for a hard
2 disk drive, comprising:

3 loading a disk that has a first side and a second side
4 into a tester that has a first head located adjacent to the
5 first side and a second head located adjacent to the second
6 side;

7 writing at least one test signal onto the first and
8 second sides of the disk;

9 reading and storing first data from the first side;

10 reading and storing second data from the second side;

11 loading the disk into the tester so that the second
12 side is adjacent to the first head and the first side is
13 adjacent to the second head;

14 reading and storing third data from the first side;

15 reading and storing fourth data from the second side;

16 calculating a first area between a curve generated from
17 the first data and a curve generated from the third data;

18 calculating a second area between a curve generated
19 from the second data and a curve generated from the fourth
20 data;

21 calculating the average of the first and second areas;
22 and,
23 determining whether the disk is defective using the
24 calculated average.

1 2. The method of claim 1, wherein the first, second,
2 third and fourth data are derived from a track amplitude
3 average of signals written onto the disk.

1 3. The method of claim 1, wherein the first, second,
2 third and fourth data are derived from a bit error rate of
3 signals written onto the disk.

1 4. The method of claim 1, wherein the average of the
2 first and second areas is compared to a threshold value.

1 5. The method of claim 4, wherein the disk is
2 discarded if the average is above the threshold value.

1 6. A tester for detecting a defective disk for a hard
2 disk drive, the disk having a first side and a second side,
3 comprising:
4 a spindle motor that rotates a disk;
5 a first head coupled to the disk;

6 a second head coupled to the disk;
7 a controller that operates a test procedure, the test
8 procedure reads and stores first data from the first side
9 of the disk through said first head, reads and stores
10 second data from the second side of the disk through said
11 second head, reads and stores third data from the first
12 side of the disk through said second head, reads and stores
13 fourth data from the second side of the disk through said
14 first head, calculates a first area between a curve
15 generated from the first data and a curve generated from
16 the third data, calculates a second area between a curve
17 generated from the second data and a curve generated from
18 the fourth data, and calculates the average of the first
19 and second areas.

1 7. The tester of claim 6, wherein the first, second,
2 third and fourth data are derived from a track amplitude
3 average of signals written onto the disk.

1 8. The tester of claim 6, wherein the first, second,
2 third and fourth data are derived from a bit error rate of
3 signals written onto the disk.

1 9. The tester of claim 6, wherein the average of the
2 first and second areas is compared to a threshold value.

1 10. The tester of claim 6, wherein said controller
2 initially writes test signals onto the first and second
3 sides of the disk.

1 11. A program storage medium that contains a program
2 which causes a tester to detect a defective disk for a hard
3 disk drive, the disk having a first side and a second side,
4 the tester having a first head and a second head,
5 comprising:

6 a program that causes a tester to read and store first
7 data from the first side of the disk through the first head
8 of the tester, read and store second data from the second
9 side of the disk through the second head of the tester,
10 read and store third data from the first side of the disk
11 through the second head of the tester, read and store
12 fourth data from the second side of the disk through the
13 first head of the tester, calculate a first area between a
14 curve generated from the first data and a curve generated
15 from the third data, calculate a second area between a

16 curve generated from the second data and a curve generated
17 from the fourth data, and calculate the average of the
18 first and second areas.

1 12. The medium of claim 11, wherein the first, second,
2 third and fourth data are derived from a track amplitude
3 average of signals written onto the disk.

1 13. The medium of claim 11, wherein the first, second,
2 third and fourth data are derived from a bit error rate of
3 signals written onto the disk.

1 14. The medium of claim 11, wherein the average of the
2 first and second areas is compared to a threshold value.

1 15. The medium of claim 11, wherein said program
2 causes said tester to initially write test signals onto the
3 first and second sides of the disk.